

## GLITE MIDDLEWARE

### 1. RELEASE DESCRIPTION

This release contains the gLite Middleware v. 1.2 (1.2.0). The following sections provide additional information about the release content, the module dependencies and known issues. The gLite Middleware is a suite of several gLite Services and clients. Please refer to the individual gLite Services and Clients release notes for additional information. For information about installing and using the gLite Middleware, please refer to the gLite Installation and User Guides.

### 2. CHANGES IN THIS RELEASE

This release is the General Availability (GA) gLite v 1.2.

In this release the following major changes are included:

- New R-GMA Server and client versions compatible with the LCG 2.4.0 clients using the Glue schema. It can be used in secure or non secure way even mixing the two modes on the same server
- New WMS and CE servers using new AuthN/AuthZ mechanism based on GSI, better matchmaking and several improvements to remove the race conditions causing job failures in the previous version
- New CE Monitor web application with better notification control
- New separate modules to install the File Transfer Service and the File Transfer Agents on separate machines or combine them together on the same host
- New support for dCache and DPM in the I/O Server
- Improved Service Discovery module to discover available services from R-GMA, BD-II or local files. This is now required by the FTS clients in the UI and WN
- New VOMS Server version
- Several bug fixes and improvements to all services

### 3. RELEASE CONTENTS

The gLite Middleware v. 1.2 is composed of the following gLite modules:

Module name	Version	File
gLite Computing Element	2.0.2	<a href="http://glite.web.cern.ch/glite/packages/R1.2/RR20050715/installers/glite-ce_installer.sh">http://glite.web.cern.ch/glite/packages/R1.2/RR20050715/installers/glite-ce_installer.sh</a>
gLite Data Management Single Catalog (MySQL)	2.0.0	<a href="http://glite.web.cern.ch/glite/packages/R1.2/RR20050715/installers/glite-data-single-catalog_installer.sh">http://glite.web.cern.ch/glite/packages/R1.2/RR20050715/installers/glite-data-single-catalog_installer.sh</a> apt-get install
gLite Data Management Single Catalog (Oracle)	2.0.0	<a href="http://glite.web.cern.ch/glite/packages/R1.2/RR20050715/installers/glite-data-single-catalog-oracle_installer.sh">http://glite.web.cern.ch/glite/packages/R1.2/RR20050715/installers/glite-data-single-catalog-oracle_installer.sh</a>
gLite File Transfer Service	2.1.0	<a href="http://glite.web.cern.ch/glite/packages/R1.2/RR20050715/installers/glite-data-local-transfer-service_installer.sh">http://glite.web.cern.ch/glite/packages/R1.2/RR20050715/installers/glite-data-local-transfer-service_installer.sh</a>
gLite I/O Client	2.0.0	<a href="http://glite.web.cern.ch/glite/packages/R1.2/RR20050715/installers/glite-io-client_installer.sh">http://glite.web.cern.ch/glite/packages/R1.2/RR20050715/installers/glite-io-client_installer.sh</a>
gLite I/O Server	2.0.0	<a href="http://glite.web.cern.ch/glite/packages/R1.2/RR20050715/installers">http://glite.web.cern.ch/glite/packages/R1.2/RR20050715/installers</a>

		<a href="#">/glite-io-server_installer.sh</a>
gLite Logging and Bookkeeping Server	2.0.0	<a href="http://glite.web.cern.ch/glite/packages/R1.2/RR20050715/installers/glite-lb_installer.sh">http://glite.web.cern.ch/glite/packages/R1.2/RR20050715/installers/glite-lb_installer.sh</a>
gLite R-GMA Client	5.0.0	<a href="http://glite.web.cern.ch/glite/packages/R1.2/RR20050715/installers/glite-rgma-client_installer.sh">http://glite.web.cern.ch/glite/packages/R1.2/RR20050715/installers/glite-rgma-client_installer.sh</a>
gLite R-GMA Server	5.0.0	<a href="http://glite.web.cern.ch/glite/packages/R1.2/RR20050715/installers/glite-rgma-server_installer.sh">http://glite.web.cern.ch/glite/packages/R1.2/RR20050715/installers/glite-rgma-server_installer.sh</a>
gLite R-GMA Service Publisher	5.0.0	<a href="http://glite.web.cern.ch/glite/packages/R1.2/RR20050715/installers/glite-rgma-servicetool_installer.sh">http://glite.web.cern.ch/glite/packages/R1.2/RR20050715/installers/glite-rgma-servicetool_installer.sh</a>
gLite Security Utilities	1.0.3	<a href="http://glite.web.cern.ch/glite/packages/R1.2/RR20050715/installers/glite-security-utils_installer.sh">http://glite.web.cern.ch/glite/packages/R1.2/RR20050715/installers/glite-security-utils_installer.sh</a>
gLite Service Discovery	1.0.0	<a href="http://glite.web.cern.ch/glite/packages/R1.2/RR20050715/installers/glite-service-discovery_installer.sh">http://glite.web.cern.ch/glite/packages/R1.2/RR20050715/installers/glite-service-discovery_installer.sh</a>
gLite Stand-Alone Metadata Catalog for MySQL	2.0.0	<a href="http://glite.web.cern.ch/glite/packages/R1.2/RR20050715/installers/glite-data-metadata-catalog_installer.sh">http://glite.web.cern.ch/glite/packages/R1.2/RR20050715/installers/glite-data-metadata-catalog_installer.sh</a>
gLite Standard Worker Node	2.0.0	<a href="http://glite.web.cern.ch/glite/packages/R1.2/RR20050715/installers/glite-wn_installer.sh">http://glite.web.cern.ch/glite/packages/R1.2/RR20050715/installers/glite-wn_installer.sh</a>
gLite User Interface	1.0.2	<a href="http://glite.web.cern.ch/glite/packages/R1.2/RR20050715/installers/glite-ui_installer.sh">http://glite.web.cern.ch/glite/packages/R1.2/RR20050715/installers/glite-ui_installer.sh</a>
gLite VOMS Server and Admin Tools	2.0.0	<a href="http://glite.web.cern.ch/glite/packages/R1.2/RR20050715/installers/glite-voms-server_installer.sh">http://glite.web.cern.ch/glite/packages/R1.2/RR20050715/installers/glite-voms-server_installer.sh</a>
gLite Workload Management System	2.0.2	<a href="http://glite.web.cern.ch/glite/packages/R1.2/RR20050715/installers/glite-wms_installer.sh">http://glite.web.cern.ch/glite/packages/R1.2/RR20050715/installers/glite-wms_installer.sh</a>
Torque + Maui Server for the gLite Computing Element Node	2.1.0	<a href="http://glite.web.cern.ch/glite/packages/R1.2/RR20050715/installers/glite-torque-server_installer.sh">http://glite.web.cern.ch/glite/packages/R1.2/RR20050715/installers/glite-torque-server_installer.sh</a>
Torque Client for the gLite Worker Nodes	2.0.0	<a href="http://glite.web.cern.ch/glite/packages/R1.2/RR20050715/installers/glite-torque-client_installer.sh">http://glite.web.cern.ch/glite/packages/R1.2/RR20050715/installers/glite-torque-client_installer.sh</a>

## 4. PREREQUISITE AND DEPENDENCIES

The gLite modules have a number of pre-requisites. All information can be found on the individual modules release notes and the gLite Installation Guide.

For a list of the external dependencies, please refer to the individual gLite Service and Clients release notes.

## 5. KNOWN ISSUES

The known issues with each module in this release are detailed in the individual release notes. The most important issues are:

- Currently jobs get a full proxy rather than a restricted one as done in LCG. This is needed for multi-hop submission (as e.g. to condor pools but also eventually for CE – CE submission) and apparently GT4 abandoned support for restricted proxies. Security implications need to be better understood. Currently being discussed in the MWSCG.
- If multiple R-GMA archivers are used, the content is sometimes inconsistent. The problem is under investigation
- gLite I/O and gLite FTS security models conflict. The update of the architecture document (DJRA1.4) contains a first description of the plan. The issue is being actively discussed

- FTS Transfer Agent for a channel is per-VO. The design to have separate multi-channel instances has been worked out. It will be released in gLite 1.3
- Oracle Fireman sometimes timeouts with large number of clients. So far it has been only randomly reproduced. It may be related to a race-condition in axis
- Jobs submitted with RetryCount set to 0 are resubmitted multiple times without visible reason
- glite put/get fails while putting files bigger than 2 Gb
- VOMS Admin produces internal database inconsistency faults on getGridmapUsers (used by the mkgridmap script to fill the grid-mapfile) under certain conditions involving users registered twice with the same certificate subject, but different CA keys

## 6. ISSUES CLOSED SINCE LAST RELEASE

For a list of the closed bugs and issues, please refer to the individual gLite Services and Clients release notes.

## 7. LICENSING

All gLite code is open source and developed as part of the EU-funded EGEE project. For more information on the licence and copyright statements, please refer to the EGEE web site. The licence can be found at <http://public.eu-egee.org/license/license2.html> .